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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/599,968

10/16/2006

Hubert Schierling

SCHIERLING-7

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EXAMINER

LIEU, JULIE BICHNGOC

ART UNIT

PAPER NUMBER

2612

MAIL DATE

DELIVERY MODE

04/06/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/599,968	SCHIERLING, HUBERT	
	Examiner	Art Unit	
	Julie Lieu	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 and 8-15 is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 3-7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This Office action is in response to Applicant's preliminary amendment filed June 06, 2007. Claims 1-11 were amended. New claims 12-15 were added.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Naito et al. (US Patent No. 5,355,121).

Regarding claim 1, Naito discloses a method for detecting a degree of pollution of an operational converter, comprising the steps of:

determining an operating state (temperature) of a converter (the optical disc drive, which converts signal from one form to another) component (an optical disc drive component) that is exposed to the ambient air (that is, the optical disc drive has opening which exposes the interior of the drive to ambient air) in the converter;

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determining a corresponding operating state of the converter component in the unpolluted state (that is, the predetermined temperature was determined when the filter is not dirty, which means the disc drive is in an unpolluted state), and

determining a comparison value L or H representing a comparison of these two operating states, whereby the comparison value H thus determined provides a measure of the degree of pollution of the converter (temperature is high).

See col. 3, lines 9-48.

Allowable Subject Matter

4. Claims 3-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 2 and 8-15 allowed.

The following is an examiner's statement of reasons for allowance:

No prior arts have been found to fairly teach or suggest

a. a method for detecting a degree of pollution of an operational converter comprising the step of determining the surface conductance of the converter part and determining a comparison value representing a comparison of the surface conductance whereby the comparison value provides a measure of the degree of pollution of the converter as recited in claim 2;

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b. a device of detecting a degree of pollution of an operation converter comprising a thermal model for estimating the temperature of a heat sink of the converter, a temperature sensor for determining a temperature of the heat sink, and an evaluation circuit connected to the thermal model and to the temperature sensor for comparing the estimated temperature and the determined temperature as in claim 8;

c. a device for detecting a degree of pollution of an operational converter having a voltage supply, the device comprising an evaluation circuit and a resistor bridge circuit having an input side connected to a the voltage supply of the converter, two resistors in said resistor bridge circuit that are diagonally to each other being adapted to change their resistance by heating as a result of operation, and other two resistors in said resistor bridge circuit being adapted to maintain their resistance, the resistor bridge circuit having an output connected of which is linked to the evaluation circuit a in claim 9;

d. A device for detecting a degree of pollution of an operational converter having a voltage supply, the device comprising two conductor tracks extending close to each other, one of said conductor tracks being connected to a discharge resistor, the other conductor track of the conductor tracks being connected to the voltage supply of the converter, and a voltage follower {connected in parallel with the discharge resistor as in claim 10.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 571-272-2978. The examiner can normally be reached on MaxiFlex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin Lee can be reached on 571-272-2963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Julie Lieu/
Primary Examiner
Art Unit 2612

Mar 28, 09